REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested. Claims 1-30 are pending, Claims 17-30 having previously been withdrawn, and Claims 1, 2, 5-11 and 14-16 and having been amended by way of the present amendment.

In the outstanding Office Action the title of the specification was objected to; Claims 1, 8, 9 and 16 were rejected as being anticipated by Inoue (U.S. Patent No. 5,808,911); Claims 2 and 10 were rejected as being unpatentable over Inoue in view of Kanno et al. (U.S. Patent No. 6,101,163); Claims 1, 3, 6, 7 and 8 were rejected as being unpatentable over Shimano (U.S. Patent No. 6,400,664) in view of Szerlip (U.S. Patent No. 4,571,716) and in further view of Inoue; Claim 5 was rejected as being unpatentable over Shimano in view of Szerlip and in further view of Inoue and Roh (U.S. Patent No. 6,690,633); and Claims 8, 11, 12, 14 and 15 were rejected as being unpatentable over Shimano in view of Szerlip.

In reply, independent Claims 1, 8 and 16 have been amended. For example, Claim 1 has been amended to define an optical disc drive that includes light receiving means for receiving a return light corresponding to a preceding sub-beam. The preceding sub-beam is formed on a preceding side with respect to a scan direction of the main beam. A correcting means includes a detector that detects a light output level of a source for the laser beam. A determining means determines the light detection result obtained through the correcting means, and detects a presence of a defect on the optical disc using only the preceding sub-beam of the sub-beam spots. Support for this amendment is found throughout the specification, for example at page 20, lines 1-6, and therefore no new matter is added.

An advantage with this approach is that by requiring the use of only a sub-beam spot at a preceding side with respect to the main beam spot, it is possible for the device to identify a presence of a defect, and take corrective measures by adjusting the laser power so as to

properly record signals on the defect area (see e.g. discussion at page 22, first full paragraph and page 29, bottom paragraph).

Claim 1 is rejected as being anticipated by Inoue. Applicants respectfully traverse the rejection in view of the amendment and due to the differences between amended Claim 1 and Inoue. In particular, Inoue is directed to a completely different system in which defects are detected by using two light spots (see e.g. column 22, lines 32-33, column 23, lines 46-65, as well as Figures 26a-d). Moreover, as shown in Figures 26a and 26b, two different light spots are used to detect when a particular defect will occur (area "x"). Figure 26a shows the signal that has been reproduced by the verifying spotlight S2 which precedes the other verifying light spot S4 (column 22, lines 32-33). A time delay is imparted between the two signals and then the signals are divided so that the results become a "flat" signal level at the point of the defect (column 23, lines 58-61). Accordingly, Inoue relies on two different spot beams and a signal processing algorithm to detect the presence of a defect. Once the defect is detected, an adjustment may be made in the receiving portion of the disc drive so as to avoid making read-errors.

However, a deficiency with Inoue is that it is a proprietary technique that will only work with receiving devices like those described in Inoue. Inoue does not provide a solution for making recordings on an optical disc where defects are identified. This is an advantage of the present invention that is completely absent from Inoue. Another advantage of the present invention is that the laser power is adjusted based on the detection of the defect using only the preceding sub-beam. Accordingly, the recording is made after having identified the defect and making adjustments in the recording power so that any subsequent receiver (regardless of its signal processing algorithm) could be used to read the data without error.

Accordingly, in view of the amendment to Claim 1 two features that are absent in Inoue are a determining means that detects a presence of the defect using only the preceding

sub-beam of the sub-spot beams, as well as the correcting means having a detector that detects a light output level of the source. Accordingly, it is respectfully submitted that amended Claim 1 patentably defines over Inoue. For substantially the same reasons as discussed above with regard to Claim 1 it is respectfully submitted that Claims 8, 9 and 16 also patentably define over Inoue.

Claims 2 and 10 stand rejected as being unpatentable over Inoue in view of Kanno. However, Kanno is asserted only for its disclosure of suppressing changes in signal level caused by the meandering of a groove. Assuming *arguendo* that Kanno does provide such a teaching, this does not cure the deficiency with regard to Inoue as discussed above and therefore the combination of Inoue in view of Kanno neither teaches nor suggests all the features of amended Claims 2 and 10.

Regarding the obviousness rejection of Claim 1, Shimano, like Inoue, uses two beams for making adjustments in an amount of reflectance of the disc (column 11, lines 29-35, generally). As recognized in the outstanding Office Action, Shimano does not detect the presence of defects on the optical disc.

Shimano is asserted for its disclosure of using one sub-beam spot which is formed on a preceding side for detecting a presence of defects on the optical disc. However, Szerlip does this for the purpose of avoiding the recording of any data on areas where a defect is found (column 2, lines 25-35). In contrast, Shimano relies on its disclosure of two sub-beams so that a difference may be determined between them and compensation for a light output may be made based on this difference. Thus Shimano requires the use of two beams in order to provide a compensation function, while Szerlip is merely trying to identify defects that the data cannot be recorded thereon. In contrast, Claim 1 uses only 1 beam to provide a light detection result, and also uses a detector to detect a light output level, so that a determination can be made about the presence of a defect based on the detected light. Accordingly, it is

respectfully submitted that there is no teaching or suggestion in either reference that would suggest the modification of either reference to adopt a device like that defined by amended Claim 1. Accordingly, it is respectfully submitted that the rejection of amended Claim 1 in view of Shimano and Szerlip is a product of improper hindsight reasoning. Applicants therefore request the removal of the rejection of amended Claim 1. Although of differing scope, dependent Claims 3-7 are also believed to define over Shimano in view of Szerlip for at least the same reasons as discussed above with regard to amended Claim 1.

With regard to Claim 5, Claim 5 is rejected over a combination of four references, namely, Shimano, Szerlip, Inoue and in further view of Roh. Roh is asserted for its alleged disclosure of changing an amount of light for writing in a defective area based on a defect determination result to maintain a constant asymmetric ratio. However as discussed above, each of Inoue, Shimano and Szerlip operate on different principles (Inoue operating on a ratio principle, Shimano operating on a difference principle, and Szerlip operating on a detect and avoidance principle). Accordingly, it is respectfully submitted that there is no teaching or suggestion in the references to provide a motivation for altering any of the references to arrive at the presently claimed invention in view of Roh. Accordingly, it is respectfully submitted that Claim 5 also patentably defines over Szerlip, Shimano, Inoue in any combination with Roh.

Once again although of differing class and/or scope, Claims 8, 11, 12, 14 and 15 stand rejected over the combination of Shimano in view of Szerlip. However, as previously discussed with regard to the above-identified claims it is respectfully submitted that Claims 8, 11, 12, 14 and 15 also define over the asserted prior art for at least the same reasons as discussed above with regard to Claim 1 and the other claims discussed above.

Claim 13 stands rejected as being unpatentable over Shimano in view of Szerlip and in further view of Roh. However, as Claim 13 depends from Claim 8, it is respectfully

submitted that no matter how Shimano and Szerlip are combined with Roh, one of ordinary skill in the art would not have been motivated to make such a combination and arrive at the presently claimed invention. Thus it is believed that Claim 13 patentably defines over the asserted prior art.

In view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-16, as amended, is patentably distinguishing over the prior art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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